

5. The method of Claim 1 wherein the step of determining a set of cells comprises the step of calculating a percentage likelihood that a user
5 requesting the session will affect each of a predetermined number of cells and comparing such percentages to a random number and selecting the set of cells responsive to the comparison.

10 6. The method of Claim 1 wherein the step of determining whether the selected set of cells have sufficient bandwidth comprises the step of calculating a probability that a user requesting the session will enter a given cell and multiplying the probability by the
15 requested bandwidth to yield a probabilistic weighted bandwidth and comparing the probabilistic weighted bandwidth to the actual available bandwidth in the given cell.

20 7. The method of Claim 1 and further comprising:
storing in a data base for a plurality of potential users of the network a data set representing the historic usage pattern of each of the plurality of users with respect to the percentage of calls which affect a
25 plurality of numbers of cells.

00010633 072004
F000'000000

11. A data communications system comprising:

a plurality of base transceiver stations each station associated with a cell;

5 a resource manager in communication with each of the base transceiver stations and operable to perform an admission control decision upon request from the base transceiver stations, the admission control decision comprising the steps of:

10 determining whether there is sufficient bandwidth to accommodate the session in the initial cell associated with the request;

determining a set of contiguous set of cells contiguous to the initial cell to which the session may be transferred during the pendency of the session;

15 determining whether the contiguous cells have sufficient bandwidth to service the session; and

admitting the session to the initial cell if there is sufficient bandwidth in the initial cell and the identified contiguous cells.

20

12. The system of Claim 11 wherein the resource manager is operable to store and use a table of data comprising historic usage information for a plurality of users of the system.

25

13. The system of Claim 12 wherein the historic usage information comprises information associated with the cells in the system most frequently occupied by the user.

30

062891.0537

14. The system of Claim 12 wherein the historic usage information associated with the number of cells affected by calls made by each of the plurality of users.

5 15. The system of Claim 11 wherein the resource manager is operable to store and use a table of data comprising historic bandwidth usages information for a plurality of cells in the system.

10 16. The system of Claim 15 wherein the usage information comprises usage information associated with usage levels at different times of day.

15 17. The system of Claim 15 wherein the usage information comprises usage information associated with usage levels at different day of the week.

09040537-072004